

### REMARKS

Based on this Amendment, the applicant respectfully requests that the rejections set forth in the Office Action mailed March 3, 2009 be withdrawn.

The applicant wishes to thank the Examiner for the thorough Office action, and respectfully submits that each objection and rejection raised has been appropriately resolved herein. Each objection and rejection is addressed below, preceded by a heading similar to that found in the Office Action.<sup>1</sup>

Claims 1-5, 7-9, 14-18 and 20-24 are pending in this application. Claims 1-5, 8, 22 and 23 have been rejected. In this response, claims 1-5 and 8 have been amended. Claims 6-7 and 9-24 have been cancelled. Claims 25-38 have been newly added. No new matter has been added.

Reconsideration and withdrawal of the rejections set forth in the Office action dated March 3, 2009, are respectfully requested in view of the remarks below.

#### 35 U.S.C. § 112 Rejections

##### Claims 1-5 and 8

The Examiner rejected claims 1-5 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement, claims 1-5, 8, 22 and 23 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement, claims 1-5, 8, 22 and 23 under 35 U.S.C. §112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, claims 2-5 and 8

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<sup>1</sup> Silence regarding the position taken, or argument made, by the Examiner does not indicate any acquiescence to that position or argument. Furthermore, arguments made by the applicants with respect to a particular claim or claims apply only to those claim or claims, and not to other claims or patents/applications, unless specifically noted herein.

under 35 U.S.C. §112, second paragraph, as being allegedly incomplete for omitting essential structural cooperative relationships of elements.

Claims 22-23 have been cancelled. Although applicant respectfully disagrees, claims 1-5 and 8 have nonetheless been amended for the purposes of expediting prosecution. Such amendments have rendered the Examiner's bases for rejections no longer applicable.

The withdrawal of the rejections under 35 U.S.C. §112 is respectfully requested for claims 1-5 and 8.

*35 U.S.C. §101 Rejections*

*Claim 3*

The Examiner has rejected claim 3 under 35 U.S.C. §101. Although applicant respectfully disagrees, claim 3 has nonetheless been amended for the purposes of expediting prosecution. Such amendments have rendered the Examiner's bases for rejections no longer applicable.

The withdrawal of the rejections under 35 U.S.C. §101 is thus respectfully requested for claim 3.

**35 U.S.C. § 103 Rejections**

**Claims 1-5 and 8**

The Examiner has rejected claims 1-5, 8, 22 and 23 under 35 U.S.C. §103(a) as being allegedly unpatentable over the instant Applicant's Admitted Prior Art (AAPA) in view of Darley, et al. (U.S. Patent No. 6,122,340 A) and Svancarek (U.S. Patent No. 6,249,274 B1). Applicant respectfully disagrees. Claims 22 and 23 have been cancelled.

**1. THE OFFICE ACTION DOES NOT CLEARLY ARTICULATE REASONS WHY CLAIMS 1-5 AND 8 WOULD HAVE BEEN OBVIOUS, AND THUS NO PRIMA FACIE CASE OF OBVIOUSNESS HAS BEEN ESTABLISHED**

To properly reject claims as obvious, "the examiner bears the initial burden of presenting a *prima facie* case of obviousness."<sup>2</sup> To present a *prima facie* case of obviousness, the Examiner must show that "there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue."<sup>3</sup> Relevant considerations may include "interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art."<sup>4</sup>

Furthermore, the Examiner's analysis "should be made explicit."<sup>5</sup> "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal standard of obviousness."<sup>6</sup>

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<sup>2</sup> *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d (BNA) 1955, 1956 (Fed. Cir. 1993); Manual of Patent Examining Procedure, § 2142.

<sup>3</sup> *KSR Int'l Co. v. Teleflex Inc.*, No. 04-1350, slip op. at 14 (U.S. Apr. 30, 2007).

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*; MPEP §§ 2142-4143.

<sup>6</sup> *Id.* (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)); MPEP § 2142.

According to the MPEP § 2141,

When making an obviousness rejection, Office personnel must therefore ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied. In certain circumstances, it may also be important to include explicit findings as to how a person of ordinary skill would have understood prior art teachings, or what a person of ordinary skill would have known or could have done. Factual findings made by Office personnel are the necessary underpinnings to establish obviousness.

In sum, "[t]he key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious."<sup>7</sup> Under these standards, it is respectfully submitted that the Office Action fails to establish a *prima facie* case of obviousness, because the Office Action does not articulate an explicit reason to combine the applied references to arrive at the applicant's claims. Rather, the Office Action states, for example, the following statements:

*"The AAPA and Darley are analogous art because they are from the shared field of input devices using accelerometers to sense movement. Therefore it would have been obvious to provide the hand-held device of the AAPA with Darley's single non-perpendicularly angled accelerometer arrangement, so as to accurately sense movement of an active, walking user."*<sup>8</sup>

*"The AAPA, Darley, and Svancarek are analogous art because they are from the shared field of input devices using accelerometers to sense movement. Therefore, it would have been obvious to provide the hand-held device of the AAPA and Darley with Svancarek's angled*

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<sup>7</sup> MPEP § 2143.

<sup>8</sup> Office action, pp 12.

*accelerometer technique, so as to sense a wide range of inclination angles".<sup>9</sup>*

These statements are not clear articulations of the reasons why claims 1-5 and 8 would have been obvious. For example, the above statements fail to include explicit findings as to how a person of ordinary skill would have understood the teachings from the applied references and the alleged AAPA, or what a person of ordinary skill would have known or could have done.

More specifically, the Office Action fails to articulate how or why one skilled in the art, reading Darley and Svancarek, would not only select the specific elements from Darley and Svancarek noted in the Office Action, but also combine them in the specific the way as recited by the applicant's claims.

Moreover, the diversity of the prior art references suggest that they are art of non-analogous fields and one of skill in the art would not be motivated to combine teachings from such disparate, non-analogous references. Specifically, Darley is categorized in subclass 377/24.2 as circuits and systems for Distance and Human Activity. Svancarek is categorized in subclass 377/158 as computer graphics processing and selective visual display systems including orientation sensors. The Office action has failed to establish why one of skill in the art would reasonably combine teachings from these non-analogous fields of art besides asserting the contrary with no apparent rationale.

Thus, the Office Action does not articulate reasoning with rational underpinning to find claims 1-5 and 8 obvious, and thus the Office Action fails to establish a *prima facie* case of obviousness. Accordingly, the Office Action does not support a proper rejection under the 35 U.S.C. § 103(a).

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<sup>9</sup> Office action, pp 14.

2. **EVEN IF COMBINED, THE REFERENCES STILL LACK CLAIMED  
ELEMENTS**

The KSR decision in no way relieves the Patent Office of its obligations to "consider all claim limitations when determining patentability of an invention over the prior art."<sup>10</sup> Accordingly, it remains well settled law that a finding of "obviousness requires a suggestion of *all limitations* in a claim."<sup>11</sup> In the aftermath of KSR, the Board of Patent Appeals and Interferences has repeatedly reversed findings of obviousness when the Examiner has failed to proffer references containing all claim limitations. See, e.g., Wada, 2008 WL 142652 at \*5 which states "because the Examiner has not explained why *every limitation* in claim 1 would have been obvious to a person of ordinary skill in the art, we agree with Appellants that the Examiner has not made out a case of prima facie obviousness." (emphasis added); and see Ex Parte Challapali, 2008 WL 111346, \*4-6 (Bd.Pat.App. & Interf., Jan. 10, 2008), reversing finding of obviousness because the Examiner failed to establish sufficient reasoning for combining the references.

Independent claim 1 states that a hand held device includes a motion sensor that senses movement of the hand held device in more than one plane of motion and that the *movement is used by a processor to control the display device of the hand held device*. Independent claim 1 also specifies that the motion sensor includes an accelerometer chip "mounted at a first *non-zero angle to a first plane parallel to the circuit board* such that the accelerometer chip is slanted with respect to the circuit board".

The Examiner alleges that portions of Applicant's specification and background constitute Applicant's Admitted Prior Art ("AAPA"). Applicant respectfully disagrees

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<sup>10</sup> KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727, 82 U.S.P.Q.2d 1385 (2007).

<sup>11</sup> CFMT, Inc. v. Yieldup Intern. Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003) (emphasis added) (cited in Ex Parte Wada, 2008 WL 142652, \*4 (Bd.Pat.App. & Interf., Jan. 14, 2008)).

with such a conclusion and the general characterization in the Office action of applicant's specification as being prior art.

Specifically, the Office action inaccurately concludes that the alleged AAPA teaches an accelerometer chip that is mounted at a non-perpendicular angle with respect to the circuit board. In supporting this conclusion, the Examiner points to applicant's disclosure as follows:

*"In summary, it is necessary in prior art systems to provide one accelerometer for each desired plane of motion, i.e., 3 accelerometers for the X, Y, and Z directions, respectively. Requiring three accelerometers is a major drawback of these prior art systems due to the fact that it is expensive and uses valuable space in small devices. Additional space is required of these devices because some of the accelerometers must be mounted perpendicular to the circuit board" (Page 3 lines 1-6 of Applicant's disclosure).*

The Office action further states that since "some of the accelerometers must be mounted perpendicular to the circuit board", then it inherently follows that at least some of the accelerometers must not be mounted perpendicular to the circuit board.

However, in consideration of the description of the paragraph as a whole (as reproduced above), it is clear that each of the three accelerometers is provided for each desired plane of motion. Thus, while one accelerometer may be mounted perpendicular to the circuit board to sense the relevant plane of motion, the other accelerometers are in an orthogonal arrangement (e.g., parallel to the circuit board) to the one that is perpendicular. For example, if one accelerometer is parallel to the z-axis, the others are parallel to the x-axis and y-axis respectively.

Specifically,



*"Note that the motion sensor in prior art devices may be further composed of multiple subsidiary sensors, for example, a network of two or three accelerometers in a rigid orthogonal arrangement..." (Page 8 lines 7-10 of Applicant's disclosure).*

Therefore, while some of the accelerometers in the prior art may not be mounted perpendicular to the circuit board, they are mounted parallel to the plane of the circuit board since the applicant's characterization of the prior art devices as a whole, clearly indicates that accelerometers are arranged *orthogonally* to one another.

However, contrary to the Examiner's understanding, Applicant has in fact neither stated nor implied in the instant specification that a prior art device would include an accelerometer chip mounted at an angle with respect to a circuit board by specifically stating that prior art systems are only limited to accelerometer chips mounted at perpendicular or orthogonal orientations to one another.

The alleged AAPA thus does not teach a "non-perpendicularly mounted accelerometer" for sensing movement in more than one plane of motion. More specifically, the applicant's specification has not characterized the prior art system or device as having an accelerometer chip "mounted at a first non-zero angle to a first plane parallel to the circuit board such that the accelerometer chip is slanted with respect to the circuit board", as recited in claim 1.

Moreover, the alleged AAPA does not teach or suggest that a hand held device includes a motion sensor that senses movement of the hand held device in more than one plane of motion and that the *movement is used by a processor to "control the display device"* of the hand held device, as recited in claim 1. While the use of orthogonal accelerometers in prior art systems appears to be mentioned, there is no indication in the description of the prior art that the movement is used "to control the display device" of a hand held device, as claimed.



Thus, applicant's claim 1 is patentable over the alleged AAPA. The Examiner, in the Office Action recognizes that the alleged AAPA does not sufficiently teach the applicant's claimed subject matter and thus uses Darley to fill this gap.

However, Darley does not cure the deficiency.

Darley teaches a detachable foot mount for an electronic device (Title, Darley). Darley teaches an apparatus for "monitoring locomotion of a person that can be secured to the person's shoe" (Abstract, Darley). For example, Darley's device can be used for measuring walking, jogging, or running of people.

Thus, Darley's apparatus is unrelated to hand held devices and cannot be used as a proper reference in support of an obviousness rejection in combination with one or more other references. More specifically, Darley's teaching is unrelated to hand held devices where a motion sensor senses movement of a hand held device in more than one plane of motion and the movement is used by the processor to control the display device of the hand held device, as claimed in claim 1.

Even if Darley were combined with one or more other references, Darley alone or in combination does not teach applicant's claim 1 since Darley does not teach that movement is sensed in "more than one plane of motion".

For example, in Darley:

*"this orientation of the acceleration-sensing axis 118 at an acute angle with respect to the plane of the housing unit 100 permits the housing unit 100 to be secured to the instep of the shoe 104, with the acceleration sensing axis being oriented substantially parallel with the ground with the shoe is flush on the ground" (Col. 9 lines 7-12).*

*"...using an accelerometer to measure acceleration in a direction that is substantially parallel to a bottom of surface of the shoe or substantially perpendicular to the bottom surface of the shoe" (Col. 2 lines 22-24).*

Thus, although Darley appears to teach an accelerometer that is mounted at an angle with respect to the plane of the housing unit 100, the acceleration sensing axis is actually parallel to the ground and is only used to measure acceleration in one direction, that is parallel or perpendicular to the bottom of the shoe surface, rather than in "more than one plane of motion", as claimed by applicant.

Moreover, since Darley is unrelated, in its entirety, to portable devices and controlling a display, Darley also does not teach that the sensed motion is used "to control the display device", as recited in claim 1.

Therefore, based on at least the above stated reasons, applicant's claim 1 is patentable over Darley. Darley cannot be combined with the alleged AAPA or the additional art of record but even if combined, applicant's claim 1 is also patentable over such a combination. The Examiner, in the Office Action recognizes that Darley does not sufficiently teach the applicant's claimed subject matter and thus uses Svancarek to fill this gap.

However, Svancarek does not cure the deficiency.

Svancarek teaches a computer input device with inclination sensors (Title, Svancarek). However, Svancarek also does not teach that a hand held device includes a motion sensor having an accelerometer chip that is "mounted at a first non-zero angle to a first plane parallel to the circuit board such that the accelerometer chip is slanted with respect to the circuit board", as recited in claim 1.

In support of the rejection, the Office action points to FIG. 4 and col. 5-7 of Svancarek. However, the cited sections merely describe the sensors as being mounted such that the sensing axes are offset relative to primary axis, rather than the circuit board.

Svancarek actually makes no mention of the accelerometer's orientation with respect to a circuit board and thus does not teach or suggest the claimed subject matter of an accelerometer chip that is "mounted at a first non-zero angle to a first plane parallel to the circuit board such that the accelerometer chip is slanted with respect to the circuit board", as claimed.

Moreover, Svancarek teaches an input device that controls a connected computer. Svancarek does not teach a hand held device with a display device also having a motion sensor that senses movement of the hand held device where the "movement is used by the processor to control the display device" of the hand held device, as claimed by applicant.

The newly added independent claims include similar claim elements, and are thus allowable for at least the same and/or similar reasons.

For example, claim 25 recites, *inter alia*,

*"A hand held device, comprising. ...wherein, the accelerometer chip is mounted on a circuit board in the device in a slanted fashion that is neither flat nor perpendicular with respect to the circuit board;*

*wherein, the accelerometer chip senses movement of the hand-held device in more than one plane of motion and the movement used by the processor to control the display device".*

Claim 33 recites, *inter alia*,

*"A device, comprising:*

*a display;*

*a processor that controls the display of the device;*

*a motion sensor mounted on a circuit board;*

*wherein, the motion sensor is coupled to the processor and senses movements of the hand-held device in more than one plane of motion and the movements are used by the processor to control an orientation of an object viewed on said display device;*

*wherein the motion sensor includes an accelerometer chip mounted at an angle theta with respect to a first plane parallel to the circuit board;*

*wherein, the angle theta is non-zero and non-orthogonal".*

The angle theta can be selected to optimize the size of the device by decreasing the height or minimizing the Z footprint, as recited in dependent claim 36.

Overall, none of the applied references, singly or in any motivated combination, disclose or suggest the features recited in independent claim 1 thus such claim is allowable. Independent claims 25 and 33 claim similar subject matter, and are thus allowable for at least the same or similar reasons. The withdrawal of the rejections under 35 U.S.C. §103(a) is thus respectfully requested for the independent claim 1.

### Dependent Claims

Claims 2-5 and 8 depend from claim 1 and are allowable at least for depending from an allowable base claim, and potentially for other reasons as well.

Since the dependent claims are allowable for the reasons provided above, a specific discussion of the prior art associated only with rejections of the dependent claims is not necessary for the purpose of overcoming the rejections. Applicants silence regarding the applicability of any particular reference should not be taken as agreement with, or acquiescence to, any particular rejection. Applicant's silence regarding any dependent claim is not to be interpreted as agreement with, or acquiescence to, the rejection of such claim or as waiving any argument regarding that claim. Applicants amended each of the dependent claims to generally to impart precision to the claims, by more particularly pointing out the invention. Accordingly, Applicants respectfully request that the Examiner re-evaluate of the rejections.

The withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested for claims 2-5 and 8.

### No Disclaimers or Disavowals

Although this communication may include changes to the application or claims, or characterizations of claim scope or referenced art, the applicants are not conceding that previously pending claims are not patentable over the cited references; instead, any changes or characterizations are being made to facilitate expeditious prosecution of this application. Thus, the applicants reserve the right to later pursue any previously pending claims, or other broader or narrow claims, that capture any subject matter supported by this application, including subject matter that might be found disclaimed herein or by any earlier prosecution. Accordingly, anyone reviewing of this or any parent, child, or related prosecution history shall not reasonably infer that the applicants have disclaimed or disavowed any subject matter supported by this application.

**CONCLUSION**

In light of the amendments and the preceding arguments, the applicant respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance.

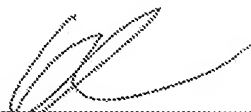
If the Examiner believes that a conference would be of value in expediting the prosecution of this application, he is cordially invited to telephone the undersigned counsel at (650) 838-4306 to arrange for such a conference.

No fees are believed to be due; however, the Commissioner is authorized to charge any underpayment in fees to Deposit Account No. 50-2207.

Dated:

9/2/2009

Respectfully submitted,

By 

Yenyun Fu

Registration No.: 59,141

Customer No.: 22918  
PERKINS COIE LLP  
P.O. Box 1208  
Seattle, WA 98111-1208  
(650) 838-4300  
(650) 838-4350 (Fax)  
Agent for Applicant